

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau(43) International Publication Date  
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number  
**WO 2004/026399 A1**(51) International Patent Classification<sup>7</sup>: A61N 1/378,  
1/375(74) Agents: HAGSTRÖM, Leif et al.: Bergenstråhle & Lind-  
vall AB, P.O. Box 17704, S-118 93 Stockholm (SE).(21) International Application Number:  
PCT/SE2003/001464(22) International Filing Date:  
18 September 2003 (18.09.2003)

(25) Filing Language: English

(26) Publication Language: English

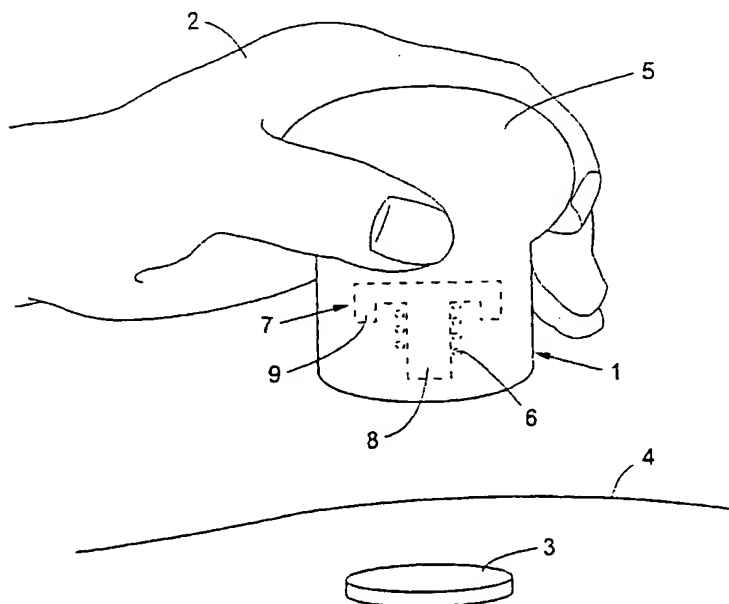
(30) Priority Data:  
60/412,014 20 September 2002 (20.09.2002) US(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,  
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,  
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,  
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,  
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,  
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).(71) Applicant (*for all designated States except US*): POTEN-  
CIA MEDICAL AG [CH/CH]; Zugerstrasse 74, CH-6341  
Baar (CH).**Published:**

— with international search report

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): FORSELL, Peter  
[SE/CH]; Aegeristrasse 66, CH-6300 Zug (CH).*For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.*

(54) Title: HARMLESS WIRELESS ENERGY TRANSMISSION TO IMPLANT



(57) Abstract: A transmission device (1) transmits an alternating magnetic field to a receiver (3) implanted in a human's body to supply energy drawn from the alternating magnetic field to an energy consuming implant in the human's body. The transmission device comprises a coil (6) adapted to generate the alternating magnetic field in a desired direction towards the implanted receiver. A shield (7) shields an operator's hand (2) from the alternating magnetic field generated by the coil. The shield includes a magnetizable core (8) extending in the coil (6) and a magnetizable casing (9) integrated with the core and surrounding the rear end of the coil and the circumference of the coil along at least a portion of the longitudinal extension of the coil.